Remarks

This communication is submitted in response to the Office Action dated November 5, 2007. Claims 1-22 are currently pending in this application. Independent claims 1, 10, and 16 are currently amended. Dependent claims 17-21 are currently amended. No new matter is introduced by these amendments and their entry is respectfully requested.

In view of the above amendment and following remarks, Applicants believe the claims are in condition for allowance and reconsideration is respectfully requested.

Claim Objections

Paragraph 3 of the Action objects to Claims 1-22 under 37 CFR 1.75(a) as failing to conform to particularly point out and distinctly claim the subject matter which applicant regards as his invention or discovery. The Examiner suggests changing "the template" to "the appropriate template" in claim 1, line 12 and in it equivalent locations in claims 10 and 16. Applicants have amended the claims accordingly and respectfully request withdrawal of this objection.

Claim Rejections under 35 U.S.C. § 101

Paragraph 6 of the Action rejects claims 16-22 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Examiner states the claim does not define a computer-readable medium or memory for the "computer program" embodying functional descriptive material

defined in claims 16-22. Applicants respectfully traverse this rejection . However, to expedite prosecution, claims 16-22 have been amended to address the Examiner's concern. Applicants therefore respectfully request that the Examiner reconsider and withdraw of this rejection.

Claims Rejection under 35 U.S.C. § 103

Claims 1-22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,668,897 to Stolfo ("Stolfo") in view of U.S. Patent No. 6,097,834 to Krouse *et al.* ("Krouse"). Applicants respectfully traverse this rejection.

Claim 1 is patentable over Stolfo and Krouse, considered alone or in combination, because they do not teach or suggest that (i) "searching the document for distinctive features and matching the document to an appropriate template", and (ii) "using the appropriate template to identify a location on the document to look for information that is desired during document processing," as recited in claim 1.

As amended, independent claim 1 of the invention currently recites:

> a method of automatically selecting document templates, comprising the steps of:
> presenting a document image from an account;
> matching the document image against a series of known document templates from the account, each document template including information about a unique layout of a particular document to allow that particular document to be identified and information in that particular document to be identified and read;
> producing confidence scores corresponding to the degree of similarity of the document image compared to each document template;
> searching the document for distinctive features and matching the document to an appropriate template; and

using the <u>appropriate</u> template to identify a location on the document to look for information that is desired during document processing.

Particular embodiments of the invention disclosed in the present application are directed to a method of automatically selecting document templates. Because of the large number of unknown locations of potential information fields, such as institutional information, dollar amounts, signatures, etc., automated processing can be difficult. A document template includes information about the unique layout of the document that may allow the system to more easily identify and read the document.

Stolfo, on the other hand, concerns a method of processing an image to produce a highly compressed image. Although Stolfo teaches searching the document for distinctive features, it does so using a database having a plurality of records, wherein each record uniquely includes "identifying codes" and "a collection of identifiers that distinguishes one record from another." (See, e.g., column 15, lines 17-23.) Stolfo teaches a plurality of records where each record's "identifying code" allows a particular document's <u>background</u> to be identified for the purpose of subtracting the background from an image to allow for compression (see, e.g., column 15 lines 5-16). Stolfo fails to teach that each record contains information about a unique layout to allow the document itself to be identified and information in that particular document to be identified and read. The "collection of identifiers" in the Stolfo records only distinguishes the records from each other (*Id.*), and has no role in identifying a particular document or allowing information in a particular document to be identified and read. Although Stolfo teaches that information, such as a signature from a document/check, may be identified (see, e.g., column 26, lines 57-66; column 27-5), the records of Stolfo themselves do not include information about a unique layout to allow

-9-

information in a particular document to be identified and read, as would be required by claims 1, 10, and 16. Rather, Stolfo teaches that the information is obtained from the remainder after the records are used to subtract the document background away. (*Id.*)

Furthermore, as stated by the Examiner on page 5 and page 12 of the Action, Stolfo fails to teach that the appropriate template is used to identify a location on the record to look for information that is desired during document processing, as required by amended claim 1. Stolfo, on the other hand, simply teaches a "template" that allows substantial compression by representing the background as merely a simple identifying code. (See Stolfo, column 7, lines 52-54).

Krouse fails to cure the deficiency in Stolfo. Krouse concerns financial transaction processing systems and methods. In particular, Krouse teaches, using an optical scanner for generating a scanned image of a portion of the document containing the visual representation and an image characterization generator for generating recognition characteristics from the scanned image (see, e.g., column 4, lines 19-23). Furthermore, Krouse disclose a characteristic comparitor for comparing the recognition characteristics to respective sets of reference recognition characteristic generated from respective <u>other transaction documents</u> having different respective formats (<u>emphasis</u> added). These "other transaction documents" are not predefined document templates or a series of known templates but, rather, previous transaction documents that have already been analyzed by the system. This is not the same as the appropriate template as described by the current application. Particularly, the "other transaction documents" does not comprise a "number of predefined document templates (those being documents in circulation in

a particular institution and only those)" (see page 3 of current application). Accordingly, claim 1 is patentable over Stolfo in view of Krouse.

Claims 10 and 16 have been amended and recite a similar teaching. Independent claim 10 is similar to claim 1, but recites a "check template", which is one type of document template. In addition, independent claim 16 is similar to claim 1, but recites a "computer program" rather than a method. Accordingly, claims 10 and 16 are also patentable over Stolfo in view of Krouse.

Claims 2-9, 11-15, and 17-22 are patentable over Stolfo in view of Krouse by virtue of their dependence on claims 1, 10, or 16. The following claims are further distinguishable from Stolfo as set forth below.

Claims 8, 15, and 21 recite the creation of one or more exclusion zones corresponding to image parts that exhibit a low confidence score. The Examiner broadly interprets an exclusion zone as covering any action taken if the image part of the check does not match with a pre-established threshold. The present invention's description of exclusion zone, however, is distinctly defined differently in claims 7, 14, and 20, from which claims 8, 15, and 21 respectively depend. Specifically, claims 7, 14, and 20 recite that the comparison is a partial layout comparison of the image parts and not a comparison of the entire image as a whole. Only the image parts and not the entire image is excluded from further processing if that image part has a relatively small zone of low-confidence matching. (See, e.g., present application ¶ 61.) Such image parts are labeled as an exclusion zone and would be excluded from future image feature comparisons. Consequently, Stolfo fails to teach the creation of one or more exclusion

zones corresponding to image parts that exhibit a low confidence score. Accordingly, claims 8, 15, and 21 are also patentable over Stolfo and Krouse, viewed alone or in combination.
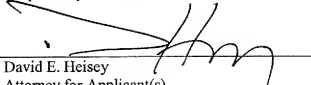
In view of the above, Applicants respectfully requested that the rejection of claims 1-22 under 35 U.S.C. § 103(a) be withdrawn.

Conclusion

Based on the foregoing, favorable reconsideration and allowance of claims 1-22 is

solicited. If necessary, the Commissioner is hereby authorized in this and concurrent replies to

charge payment (or credit any overpayment) to Deposit Account No. 19-1853 for any additional

required fees.

Respectfully submitted,

Date: March 11, 2008

David E. Heisey
Attorney for Applicant(s)
Reg. No. 42,651

SHEPPARD MULLIN RICHTER &
  HAMPTON LLP
333 S. Hope Street, 48th Floor
Los Angeles, CA 90071
Telephone No.: (858) 720-8900
Facsimile No.: (858) 509-3691